

XXXI.—*Description of a Sub-Genus of Coleopterous Insects, closely allied to the Genus Carabus.* By G. R. WATERHOUSE, Esq., Curator to the Museum and Assistant Secretary for the Scientific Department of the Zoological Society.

[Read June, 1840.]

A most interesting carabideous insect from St. Helena having been placed in my hands by the Rev. F. W. Hope for the purpose of publication, I beg leave, by his desire, to exhibit it to the Members present, to point out its characters, and at the same time to apply to it as a specific name that of its discoverer—the celebrated African traveller—Mr. Burchell.

The principal characters of this insect may be thus expressed:—

Family CARABIDÆ.

Genus CARABUS.

Sub-Genus APLOTHORAX.*

Caput satis grande.

Antennæ longæ, et crassiusculæ.

Mandibulæ breviusculæ, robustæ, ad basin subbidentatæ.

Labrum angustum, transversale, anticè emarginatum.

Mentum profundè emarginatum, et dente centrali armatum.

Thorax parviusculus, absque marginibus reflexis, vel foveis, postice angustatus.

Elytra oblongo-ovata, subdepressa, ad apicem rotundata.

Pedes perlongi—femoribus crassiusculis.

This insect is very nearly equal in size to the *Procrustes coriaceus*, and in its general form approaches that group of *Carabi* of which *C. depressus* may be regarded as the type. In the general structure of the mouth, the great length of its tarsi, the sculpturing of the elytra, and in possessing simple notchless anterior tibiæ, it agrees with the true *Carabi*, but it differs from *Carabus* proper in the simple structure of its thorax, which is smooth and convex and has no reflected margins nor foveæ in the posterior angles;

* This name has reference to the simple form of the thorax.

its antennæ are long, and instead of being thick at the base and gradually attenuated towards the apex, as in *Carabus*, are incrassated in the middle; the third joint of the antennæ is longer than in *Carabus*, and is indeed nearly equal to the fourth and fifth taken together, the terminal joint is short. The head is large, and but little narrower than the thorax, which is cordiform, truncated before and behind, has the anterior and posterior angles rounded, an extremely faint dorsal channel, and a smooth and glossy upper surface; its greatest width is near the fore part, and behind it is considerably contracted. The elytra are ample, depressed, rounded at the apex, broadest in the middle, and somewhat suddenly contracted near the thorax: they are rather delicately punctate-striated, and punctures are observable between the third and fourth, and seventh and eighth, striæ; these punctures are confluent with those of the striæ, and divide the interspaces of the striæ, where they occur, into small compartments like the links of a chain, as observable in very many of the true *Carabi*. The region of the suture is somewhat raised, and there is a slightly elevated but broad ridge running parallel with, and at a little distance from, the outer margin of each elytron. The striæ of the elytra are very close together, and so are the small punctures of which these striæ are composed—they are less deep than in *Carabus monilis*. The legs are much longer than usual in *Carabus* proper, and the femora of all the legs (more especially those of the anterior pair) are stout: the tibiæ of the anterior legs are considerably dilated at their apex, and present a concavity on the under side of this portion: those of the hinder legs are densely clothed with velvet-like hairs on the innerside of the apical half, and the four basal joints of the anterior pair of tarsi are provided with velvet-like cushions on the underside.* The maxillary palpi are unfortunately imperfect; the terminal joint of the labial palpi is truncated, but not dilated at the extremity as in *Carabus*.

By those Entomologists who regard *Procerustes* and *Procerus* as genera, the present insect would no doubt be also considered as constituting a genus, but as the nature of the characters which serve to separate these minor groups from *Carabus* I cannot think

* The fact that in *Carabus* proper, as well as *Procerus* and *Procrustes*, the females are distinguishable, among other characters, by the absence of these velvet-like pads, leads us to suppose the present insect is a male; and if so, the anterior tarsi not being dilated, furnishes an additional distinguishing character between the present sub-genus and *Carabus*. In the male *Procrustes* there are but *three* of these padded joints.

are of sufficient importance to constitute genera, I can but regard them as off-sets as it were of the great genus *Carabus*.*

Aplothorax Burchellii. (Plate XII. fig. 1.)

Aploth. niger; *thorace cordiformi, anticè et posticè truncato, angulisque anticis et posticis rotundatis, suprâ lævi et convexo; elytris punctato-striatis, striis punctisque crebris at non profundis; inter strias tertiam quartamque, et 7-mam et 8-ram, punctis grandioribus cum illis striarum confluentibus.*

Mus. Dom. Hope. Habitat apud St. Helenam.

The total length of this insect is	1	$3\frac{1}{2}$
Width of the elytra	0	$5\frac{3}{4}$
Length of head	0	$3\frac{1}{4}$
Width of head	0	3
Length of thorax	0	$3\frac{1}{4}$
Width of thorax	0	$3\frac{1}{2}$

Plate XII. fig. 1. *Aplothorax Burchellii* of the natural size.

1 *a*, labrum; 2 *b*, mandible; 1 *c*, and 1 *d*, upper and under side of the maxillæ; † 1 *e*, mentum, labium, and labial palpus; 1 *f*, antenna; 1 *g*, fore foot.

* The relative number of species, together with their geographical distribution, furnish physiological characters which will hereafter in all probability be taken into consideration, when the value of groups is to be determined.

† [This is the only instance hitherto observed in which such a structure of the apical portion of the maxilla as is exhibited by this insect exists. I was particular in noticing that both maxillæ agreed in this formation.—*J. O. W.*]